## ON FIVE NEW AMERICAN LITHOBIID CENTIPEDS

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The new species here diagnosed are members of the order Lithobiida. They were noted in the course of an examination of several lots of chilopods that were in the liands of the author for identification.

## Family Lithobidaf <br> POKABIUS AETHES Chamberlin, new species

Dorsum yellowish brown, with the head, first tergite and the posterior borders of the more caudal tergites chestnut.

Ocelli $1+4,4,3$. Antennae composed of the usual twenty articles. Prosternal teeth $2+2$; the anterior margin of prosternum shouldered ectad of the outer tooth on each side; the porodont hairlike.

Posterior angles of none of the dorsal plates produced.
Ventral spines of the first legs $0,0,2,3,2$; of the penult legs, $0,1,3,3,1$; of the anal legs also $0,1,3,3,1$, the terminal claw simple.

Distinct from all other known species of Pokabius sens. str., to to which it belongs, in having the penult as well as the anal legs of the male conspicuously modified. In both of these legs the femur is eleveated into a rounded lobe at the proximal end and is also, though less, elevated at the caudal end, the dorsal surface being concave between the two processes; in both pairs of legs the tibia is longitudinally furrowed along its ventral face, the furrow deeper on the anal than on the penult legs.

Length, about 9 mm .
Locality: California: Willow Creek One male taken by R. V. Chamberlin, July 14, 1937.

GENUS MESOBIUS Chamberlin, new
Ocelli seriate. Articles of antennae numerous. Prosternal teeth fixed at $2+2$. Posterior angles of none of the dorsal plates produced. Tarsi of all legs biarticulate. Distinguished from Archilithobius in having the anal legs of the male conspicuously modified, in these the femur being more or less swollen and excised at distal
end on mesal side where bearing a process projecting mesad. Claw of female gonopods bi- or tripartite.

Generotype: Mesobius daniamus Chamberlin, new species.
This genus includes also the European Lithobius castaneus of Newport.

MESOBIUS DANIANUS Chamberlin, new species
Dorsum light brown, the head and posterior tergites a darker brown.

Antennae long, extending back upon sixth or seventh tergite; composed of 42 articles in the holotype.

Ocelli few, in two series; e.g., $1+3,2(3)$.
Prostemal teeth small, $2+2$; the anterior margin of the prostermum rounded off ectad of the outer tooth on each side; porodont. subsetiform.

Posterior angles of none of the dorsal plates produced.
Leg 1 with no ventral spines. Ventral spines of the penult legs $0,1,1,1,0$; of the anal legs also $0,1,1,1,0$, with the claw double.

In the anal legs of the male the femur is swollen; obliquely excised at distal end on mesal side and there bearing a mesally directed subcylindrical process which is distally truncate or with distal surface a little convex and which widens a little at base.

Claw af the female gonopods bipartite, the outer lobe much longer than the inner one; both teeth distally rounded. Basal spines $2+2$, these gradually acuminate from base with the tip narrowly rounded.

Length 10 to 13 mm .
Locality: Florida: Dania. One male and two females.
Distinguishable from Mesobius castaneus (Newport), an European species, in having the claw of the anal legs double and in the more sparse spining of the legs.

## Family Ethopolidae

## ETHOPOLYS TIMPIUS Chamberlin, new species

Dorsum light brown, the head and candal tergites more yellowish. Legs also light brown, the caudal pairs and the antennae bright yellow.

The head with lateral margining nearly continuous, although
the margin is indented at the level where a definite break occurs in other species. Antennae reaching to or a little beyond the sixth tergite, composed of the usual 20 articles which are mostly long and slender. Ocelli in an elongate patch, with the series curved and irregular; e.g., $1+6,6,4,2$.

Prosternal teeth ectad of diastema 3, those within typically 6 on each side.

Posterior angles of none of the dorsal plates produced.
Ventral spines of first legs $0,0,2,3,2$; dorsal, $0,0,2,2,1$. Dorsal spines of second legs, $0,0,3,2,1$. Ventral spines of penult legs 1, 1, 3, 3, 2; dorsal, 1, 0, 3, 2, 1. Ventral spines of anal legs, $1,1,3,2,1$; dorsal, $1,0,3,1,0$; claw double.

Claw of genital forceps of female long and acute, a weak tooth on each side. Basal spines $3+3$.

Length, 30 mm .
Locality: Utah: Provo Canyon, Briday Veil Falls at upper limits.
Apparently distinct in the absence or slightness of a lateral marginal break on the head. Related to $E$. integer Chamberlin but different in having low but distinct lateral teeth on the claw of the female gonopods. Resembling E. bipunctatus (Wood), which occur in the same general area, in color but obviously distinct in the shorter antennae and in having normally 3 , instead of 2 , posternal teeth ecad of the diastema on each side.

ETHOPOLYS CALIBIUS Chamberlin, new species
Dorsum dark chestnut, the posterior segments in particular with a median longitudinal stripe of darker color. Legs also chestnut colored proximally, lighter over tarsi.

Antennae long, reaching back upon the eighth tergite; composed of 20 articles which are mostly long and proportionately slender. Head with lateral marginal breaks. Ocelli $1+5,5,4,3$, the single ocellus large.

Prosternal teeth $9+9$ with no diastema and a definite porodont not detectable in the type specimen.

Posterior angles of none of the dorsal plates produced except those of the thirteenth on which they are small and acute. Tergites rugose, especially the more posterior ones.

Ventral spines of first legs $0,0,2,3,2$; dorsal, $0,0,3,2,1$. Ventral spines of penult legs, $1,1,3,3,2$; dorsal $1,0,3,1,1$; the claw single. Ventral spines of anal legs $1,1,3,2,1$; dorsal $1,0,3,1$,

0 . Last four pairs of coxae armed ventrally, the last two laterally.
Claw of the female genital forceps with a large acuminate median lobe and a small tooth each side well toward the base. Basal spines $4+4$.

Length: 28 mm .
Localiry: California: Prairie Creek. One female taken July 10, 1946.

Distinct from other known species of the subgenus Archethopolys in lacking a diastema in the prosternal dental series and in having claw of the female gonopods practically entire.

## ETHOPOLYS SPEC'IANS Chamberlin, new species

Dorsum, including head and antennae, light chestnut, with a darker median longitudinal line evident posteriorly. Legs brown. Antemnae relatively shorter than in related species; composed of the normal 20 articles which are of moderate length. Head with lateral marginal interruptions distinct. Ocelli in three series forming an oblong patch; thus, $1+4,4,2$.

Prosternal teeth $9+9$, one of these teeth on each side occupyin the space usually forming the diastema, this tooth lying in front of the fine porodont, one tooth ecad of this one.

Posterior legs missing from the type.
Posterior angles of ninth, eleventh and thirteenth dorsal plates acutely produced but the processes unusually small. Tergites irregularly rugose, most distinctly scabous on the caudal portion.

Claw of the female gonopods with an acute median lobe or tooth which is moderate in length, the side teeth blunt and weak. Basal spines $3+3$.

Length, 19 mm .
Localitys British Columbia; Vancouver Id., Spectacle Lake. One female taken by Dr. G. C. Carl on May 12.

